## SOW FOR HONEYWELL AVIONICS PROTECTION PLAN (HAPP)

1.0 Introduction: The Stratospheric Observatory For Infrared Astronomy (SOFIA) Program consists of an airborne observatory platform (a Boeing 747-SP aircraft, N747NA-S/N 21441) equipped with a 2.5 meter infrared telescope, and multiple subsystems to support the telescope and other scientific instruments capable of infrared and sub millimeter observations. The SOFIA Observatory is being developed by NASA and its partner the DLR (German Aerospace Center). The SOFIA Observatory is the world's largest and most sensitive airborne observatory. The aircraft will operate on a worldwide basis at a ceiling of 45,000 feet. The telescope will look out of an open cavity in the side of the aircraft and allow astronomers to obtain sharper infrared images than ever before for a planned operational life of 20 years, including mission operations from remote landing sites.

The SOFIA aircraft recently completed an avionics upgrade using Honeywell avionics components. Repair and replacement of defective components will be required throughout the service life of the aircraft. The Honeywell Avionics Protection Plan will provide a 24/7 one day component replacement service to support the SOFIA mission on a worldwide basis.

- 2.0 Scope: This statement requires the contractor to provide 24/7 one day replacement service for SOFIA Honeywell avionics components through an annual HAPP subscription between NASA and Honeywell.
  - 2.1 A comprehensive list of SOFIA Honeywell components will be provided.
  - 2.2 The HAPP will be based on an annual 1100 SOFIA flight hours.
- 3.0 Seller Responsibilities: The Honeywell Avionics Protection Plan will provide a 24/7 one day component replacement service to support the SOFIA mission on a worldwide basis.
  - 3.1 The seller will provide a point of contact for plan coordination and component replacement.
- 4.0 Buyer Responsibility: Provide a list of Honeywell avionics components to be supported with an estimate annual flight estimate.
  - 4.1 Buyer will provide a point of contact for plan coordination and component replacement.
  - 4.2 Buyer will insure that defective components are shipped in accordance with HAPP procedures.
- 5.0 Schedule: The HAPP will be established no later than August 1, 2013.
- 6.0 Projection Completion: When a one year HAPP subscription to be renewed annually is in place.

Attachment A, Rev. 1 Statement of Work (SOW) June 6, 2013

- 7.0 Pricing and Payment: Pricing for the service will be based on Honeywell components installed on the SOFIA aircraft and estimated annual flight hours.
  - 7.1 Honeywell prior to implementation of the plan.
  - 7.2 NASA will make payment upon implementation of the plan.

## 8.0 Additional Terms:

HONEYWELL AVIONICS PROTECTION PLAN (HAPP) TO PROVIDE 24/7 ONE DAY REPLACEMENT OF DEFECTIVE HONEYWELL AVIONICS COMPONENTS

Aircraft Type: B747 Annual flight hours: 1100

The part numbers to be included on the HAPP coverage:

Adv File Graphic Svr 1	Honeywell	AFGS-L	7036478-902
Adv File Graphic Svr 2	Honeywell	AFGS-L	7036478-902
Data Loader	Honeywell	DL-550	G7226-02
Display Unit 1	Honeywell	DU-1080	7037625-13006
Display Unit 2	Honeywell	DU-1080	7037625-13006
Display Unit 3	Honeywell	DU-1080	7037625-13006
Display Unit 4	Honeywell	DU-1080	7037625-13006
EGPWS Computer	Honeywell	Mk-VII965-1076-020-232-232	
FMS Commputer 1	Honeywell	FZ-2000	7018879-03034
FMS Commputer 2	Honeywell	FZ-2000	7018879-03034
FMS Commputer 3	Honeywell	FZ-2000	7018879-03034
FMS MFCDU 1	Honeywell	CD-820	_2888-08-1
FMS MFCDU 2	Honeywell	CD-820	_2888-08-1
FMS MFCDU 3	Honeywell	CD-820	_2888-08-1
GPS Rcvr 1	Honeywell	GNNSU	HG2021GD04
GPS Rcvr 2	Honeywell	GNNSU	HG2021GD04
Integrated Co 1	Honeywell	IC-1080	7017000-20704
Integrated Computer 2	Honeywell	IC-1080	7017000-20704
Intertial Ref Unit 1	Honeywell	Laseref VI	HG2100BB02
Intertial Ref Unit 2	Honeywell	Laseref VI	HG2100BB02
Intertial Ref Unit 3	Honeywell	Laseref VI	HG2100BB02
MFD Ctl 1	Honeywell	MC-800	G7280-964
MFD Ctl 2	Honeywell	MC-800	G7280-964
PFD Ctl 1	Honeywell	DC-550	G7281-148
PFD Ctl 2	Honeywell	DC-550	G7281-148
Radar Ctl 1	Honeywell	WC-880	7008471-408
Radar Ctl 2	Honeywell	WC-880	7008471-408
Radar R/T	Honeywell	WU-880	7021450-001
WX Array	Honeywell	N/A 7021479-4	
XM WX Rcvr	Honeywell	XMD157-02	4092743-901

9.0 Miscellaneous: N/A 10.0 Appendices: N/A